VENTILATION &COORDINATED FIRE ATTACK

The term ***coordinated fire attack*** relates to the sytematic, orchestrated and deliberate actions taken by units dispatched to a fire scene, effectively communicated for the purpose of promoting life safety, fire control and extinguishment. Each unit dispatched on every full assignment has a task oriented responsibility; first, as it relates to our MCFRS Safe Structural Firefighting SOP, and second, as it relates to traditional unit specific duties and responsibilities, all with the primary goal of protecting and preserving life and property. These task driven duties, some routinely accomplished and some based upon conditions on arrival, must be clearly communicated between units on the scene of an incident.

In its purist form, the jobs of the engine, truck, and rescue companys in our system are as follows:

- Engine companys are to stretch hose lines to the seat of the fire for the purpose of confinement and extinguishment while protecting the primary search.
- Truck companys are responsible for ventilation, laddering the building, forced entry, and rescue.
- Rescue squads are responsible for the initiation of a primary search, secondary search, and utility control.

These various task oriented assignments are, as earlier stated, SOP driven and may be initiated based upon an array of priorites found on arrival. All are completed in a synchronized fashion; one supporting the other until the conclusion of the incident.

Ventilation, a primary responsibility of the ladder company, is certainly an extremely important task, in addition to being one that must be coordinated with fire attack and not done randomly. There are two primary reasons for ventilation:

1. ***Venting for fire*** allows attack crews to enter the structure and commence fire control efforts in less than favorable conditions. Typically, the opening [in relation to horizontal ventilation] is made ahead of the attack line to permit smoke and heated gases to vent as attack crews are entering.

2. ***Venting for life*** provides fresh air to a specific area in a structure (*usually univolved with fire*), thus improving visibility for the primary search and viability for the victims. This procedure is usually synonomous with the vent, enter, and search (*VES*) technique. It can be done far from the area of fire involvement or in a room next to the fire itself.

Whether venting for fire or venting for life, if ventilation efforts are not coordinated with interior crews, disasterous results may occurs. If fresh air is introduced into a burning structure either without confirmation of an attack crew ready to enter with a charged line or prior to the arrival of an attack crew on the scene, the fire may go from being fuel controlled to becoming ventilation controlled within seconds. When this happens, the fire may grow significantly theatening interior and exterior exposures alike as well as the safety of entering crews. Premature ventilation can cause significant fire

spread along the outside of structures composed of light weight construction with vinyl siding; fire can travel to the eaves or gable vents of the roof. Another example would be uncoordinated ventilation during the attack of a basement fire with uninformed crews operating on the floor above; unsafe conditions may lead to firefighter injury of death.

Premature ventilation can aid in the spread of fire to exterior exposures. Charged hose lines must be in place

Ideally, horizontal ventilation should occur just before entry of the attack crew and not far in advance. This effort should be communicated between the truck members prepared to vent and entering engine and rescue companys in a coordinated manner (*via radio or face to face*).

Pressurized ventilation, typically in the form of PPV, should also be coordinated with the fire attack. Numerous examples of fire spread and extension have been linked to the use of PPV prior to the location and confinement of fire. Pressurized ventilation should be withheld until confirmation of the fires location is made under the protection of an attack line. Good judgement should be exercised when electing to utilize PPV to ventilate fires in structures that traditionally do not have inherent fire stopping (*balloon frame and stack construction*). Numerous broken windows in inappropriate locations may render PPV operations ineffective; entrance and exhaust portals must be controlled for efficient removal of smoke.

Pressurized ventilation must be withheld until placement of charged lines have been established on affected floors

Ventilation efforts should always be coordinated through command, once established, or between the truck and engine crews prior to entry. Whether venting for life or venting for fire, initiate ventilation with a purpose, time ventilation with entering attack crews, and always have a charged hose line ready.

Sources: Fire Officer's Handbook of Tactics, third Edition, John Norman

www.firetactics.com

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